

N in the benzimidazole molecty means that one of the ring carbon atoms substituted by R6-R9 optionally may be exchanged for a nitrogen atom without any substituents;

R<sub>1</sub>, R<sub>2</sub> and R<sub>3</sub> are the same or different and selected from the group consisting of hydrogen, alkyl, alkoxy, fluorine-substituted alkoxy [optionally substituted by fluorine], alkylthio, alkoxyalkoxy, dialkylamino, piperidino, morpholino, halogen, phenyl and phenylalkoxy;

R4 and R5 are the same or different and selected from the group consisting of hydrogen, alkyl and aralkyl;

R6' is hydrogen, halogen, trifluoromethyl, alkyl and alkoxy;

R6-R9 are the same or different and selected from the group consisting of hydrogen, alkyl, alkoxy, halogen, halo-alkoxy, alkylcarbonyl, alkoxycarbonyl, oxazolyl, trifluoroalkyl, or adjacent groups R<sub>6</sub>-R<sub>9</sub> form ring structures which may be further substituted;

R<sub>10</sub> is hydrogen or forms an alkylene chain together with R<sub>3</sub>; and

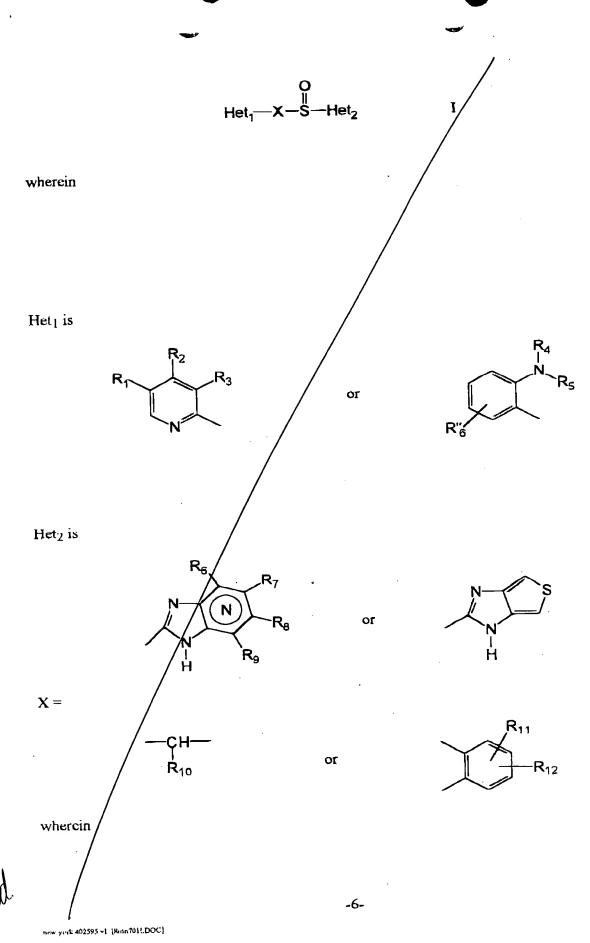
RII and Riz are the same or different and selected from the group consisting of hydrogen, haloger or alkyl.

- 2 (Amended) The [An] administration regimen according to claim 1, wherein [characterized in that] the H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor is a compound selected from the group consisting of omeprazole, an alkaline salt of omeprazole, the (-)-enantiomer of omeprazole and an alkaline salt of the (-)-enantiomer of omeprazole.
- 3. (Amended) The [An] administration regimen [giving an extended blood plasma profile of a H', K+-ATPase inhibitor] according to claim 1 or 2-wherein [any of claims 1 and 2 characterized

in that] the extended plasma profile is obtained by two or more consecutive oral administrations of a unit dose of the H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor with 0.5 - 4 hours intervals.

4. (Amended) The [An] administration regimen [giving an extended blood plasma profile of a H, K, -ATPase inhibitor] according to claim 1, wherein [characterized in that] the extended plasma profile is obtained by oral administration of the [a unit dose of a] pharmaceutical formulation [preparation] which releases the H, K, ATPase inhibitor [drug] for absorption in two or more discrete pulses separated in time by 0.5 - 4 hours.

- 5. (Amended) The [An] administration regimen according to claim 1, wherein [characterized in that] the extended plasma profile is obtained by oral administration of the [a unit dose of a] pharmaceutical formulation [preparation] which releases the H+, K+-ATPase inhibitor for absorption with an almost constant rate during an extended time period.
- 6. (Amended) The [An] administration regimen according to any of claims 1 5, wherein [characterized in that] the extended plasma profile is maintained for [received during] 2 - 12 hours.
- 7. (Amended) An oral pharmaceutical formulation comprising an H', K<sup>+</sup>-ATPase inhibitor and a pharmaceutically acceptable carrier, wherein the formulation induces [composition giving] an extended blood plasma profile of the [a] H+, K+-ATPase inhibitor and [, characterized in that] the II+, K+-ATPase inhibitor is a compound of [with] the formula I



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R<sub>10</sub> is hydrogen or forms an alkylene chain together with R<sub>3</sub> and

R<sub>11</sub> and R<sub>12</sub> are the same or different and selected from the group consisting of hydrogen, helogen or alkyl.

8. (Amended) The [An] oral pharmaceutical formulation [preparation] according to claim 7, wherein [characterized in that] the H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor is a compound selected from the group consisting of omeprazole, an alkaline salt of omeprazole, the (-)-enantiomer of omeprazole and an alkaline salt of the (-)-enantiomer of omeprazole.



- 9. (Amended) The [An] oral pharmaceutical formulation [preparation giving an extended blood plasma profile of a H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor] according to claim 7, wherein [characterized in that] the pharmaceutical formulation [preparation] releases the H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor [drug] for absorption in two or more discrete pulses separated in time by 0.5 4 hours.
- 0. (Amended) The [An] oral pharmaceutical formulation [preparation] according to claim 7, wherein [characterized in that] the pharmaceutical formulation [preparation] releases the H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor for absorption with an almost constant rate during an extended time period.
- 11. (Amended) The [An] oral pharmaceutical formulation [preparation giving an extended blood plasma profile of a H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor] according to any of claims 7 10, wherein [characterized in that] the extended plasma profile is maintained for [received during] 2 12 hours.
- 15. (Amended) A method for improving inhibition of gastric acid secretion comprising (which comprises) administering to a patient in need thereof, an the oral pharmaceutical formulation [composition] as claimed in any of claims 7 10.
- 16. (Amended) A method for improving the [therapeutic effect in the] treatment of gastrointestinal disorders associated with excess acid secretion comprising [which comprises] administering to a patient in need thereof[, an] the oral pharmaceutical formulation [composition] as claimed in any claims 7 10.

## Add new claims 18 and 19:

18. An administration regimen for improved inhibiton of gastric acid secretion characterized by an extended blood plasma profile of an H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor, comprising the oral administration of a pharmaceutical formulation comprising a therapeutically effective amount of the H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor having the formula I

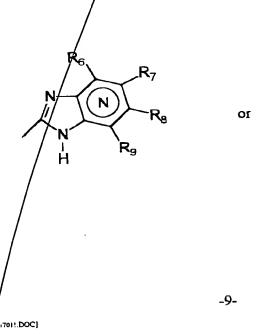
O Het<sub>1</sub>—X—S—Het<sub>2</sub>

wherein

Het<sub>l</sub> is

$$R_1$$
  $R_3$  or

X =



ĭ

R

OT

wherein

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R<sub>11</sub> and R<sub>12</sub> are the same or different and selected from the group consisting of hydrogen, halogen or alkyl,

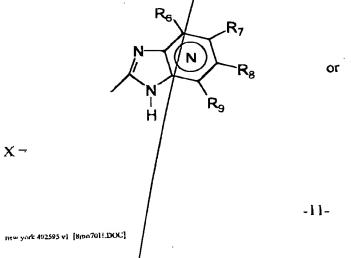
with the proviso that the H / K -ATPase inhibitor is not pantoprazole.

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19. An oral pharmaceutical formulation comprising an H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor and a pharmaceutically acceptable carrier, wherein the formulation induc s an extended blood plasma profile of the H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor and the H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor is a compound of the formula I

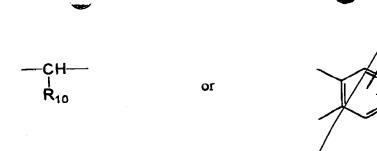
wherein

$$R_1$$
  $R_2$   $R_3$  or



I

Oppl



wherein

N in the benzimidazole moiety means that one of the ring carbon atoms substituted by R<sub>6</sub>-R<sub>9</sub> optionally may be exchanged for a nitrogen atom without any substituents;

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 $R_{11}$  and  $R_{12}$  are the same or different and selected from the group consisting of hydrogen, halogen or alkyl,

with the proviso that the H<sup>+</sup>, K<sup>+</sup>-ATPase inhibitor is not pantoprazole.

